SITE CHARACTERIZATION REPORT: THE PERFECT IMAGE (CHURCH'S BODY SHOP) 3RD AVE. DRIVE (OLD LENOIR ROAD), HICKORY, CATAWBA COUNTY

Prepared For:

Mr. Terry Church
Church's Body Shop, Inc.
P. O. Box 1528
Hickory, NC 28603-1528
704-396-2185

Prepared by:

Salem Environmental/Certifoam Services, Inc.
P. O. Box 5524
Winston-Salem, NC 28113-5524
910-661-9231 fax 661-9241

OCTOBER 11, 1994

I. SUMMARY

Environmental assessment at UST system closure in July of this year found petroleum impacted soil. Total petroleum hydrocarbons (TPH) concentrations were elevated under three gasoline USTs, product lines, and pump island. Excavation removed as much impacted soil as possible.

Five soil borings investigation were advanced for initial site characterization. TPH concentrations at boring bottoms are less than in closure samples. One boring was completed as a monitoring well. Ground water sampled from the well is impacted.

II. BACKGROUND

Cultural Setting The former Church's Body Shop facility sits in near west side of Hickory. The area is heavily developed with manufacturing and commercial facilities. A former auto dealership is across 3rd Ave. Drive and a furniture factory is downhill across the rear street. The site occupies a wedge between 3rd Avenue Drive and 11th Street Drive. The facility was originally a service station and probably dates from the 1940's or earlier. The site is now leased to The Perfect Image, an auto detailing business. City water and sanitary sewer serve the area. No supply wells are suspected to exist within 1500 feet.

Two maps are provided. Figure 1 locates the site on the Hickory topographic map. Figure 2 is a map of the site showing pertinent features.

Physical Setting The site is built up to the grade of 3rd Avenue Drive (Old Lenoir Road). A retaining wall elevates the grade above 11th Street Drive. The wall is bowed out and the fill dirt under the facility pavement has settled. Several USTs were set so close to this wall that they could not be excavated and were filled with foam. Storm sewers run along both roads. The property has a modest slope toward the north. Runoff goes to 11th Street Drive.

Geologic setting of the site is in the Inner Piedmont Belt. The 1985 Geologic Map of NC indicates that bedrock beneath the site is a micaceous schist. The soil developed on these crystalline rocks consists of a thin topsoil lacking in organic matter and a clay rich residuum followed below by a thick subsoil having the texture and structures of the underlying crystalline rock. This is saprolite, a soil developed in place by chemical weathering of bedrock. Most ground water is contained in the porous saprolite. Far greater permeability exists in fractures in the deeper, much less porous bedrock. As a result, much ground water movement takes place through bedrock while most storage is in the saprolite.

UST Closure Eight tanks were closed at this site starting on July 11. Two of these USTs (#s 6 & 8) were orphan tanks discovered during our work; UST #8 was beneath tanks 1 & 6. Four were excavated and removed while three others were closed in place due to physical constraints prohibiting removal. The three closed in place were numbers 2, 3, & 7, shown on the site map. There was strong petroleum odor in soil beneath UST #4 and light odor in soil beneath UST #6 and at the pump island. Faint petroleum odor was also present in sample 3B, taken by hand auger. The highest TPH concentration found was 504 ppm by 5030/8015M in sample 4B.

Scope of Services Mr. Terry Church is the responsible party. He authorized Certifoam Services/Salem Environmental to perform a soil borings investigation and to install a ground water monitoring well in one of the borings. We were also to prepare a report of results as a first step toward a comprehensive site assessment. Blue Ridge Labs, Lenoir, was subcontracted to perform the analytical work.

III. INVESTIGATION

The soil borings investigation took place on August 29. Five borings were advanced with our hollow-stem auger drill rig. Boring locations are shown on Figure 3. Borings were located close to closure sampling points in the area indicated by lab results to be impacted. Boring E was advanced at the former waste oil UST location so that a sample could be obtained for EPA method 8021 analysis, not originally run. A monitoring well was installed in boring D with 15 feet of .010" slot, 2" diameter, screen and 25 feet of riser, both Schedule 40 PVC. Completion was by flush mount protective casing with bolt down lid. The well is secured with padlocked expansion cap. Well construction record is enclosed. Ground water sampling procedure is described below.

Ground Water Sampling Procedure Representative ground water samples are collected in accordance with EPA recommendations outlined in the "RCRA Ground-Water Monitoring Technical Enforcement Guidance Document". These procedures include purging 3 to 5 well volumes or bailing to dryness followed by a brief period to allow the well to recharge. The purged volume is calculated by multiplying the bailer capacity by the number of bails removed from the well and compared to the calculated volume of water in the well prior to bailing. Clean bailer and cord are used to take the sample. Care is taken to prevent dirtying the cord or splashing or otherwise agitating the well water. The bailer has a closed top to prevent off-gassing of volatiles and a bottom entry, ball check valve to avoid agitation. Disposable vinyl gloves are worn during sample collection from each well to prevent cross-contamination of the samples. Water is slowly poured from the bailer into teflon lined or teflon septum polypropylene capped bottles provided by the laboratory. The samples are immediately put in a chilled cooler. A chain-of-custody form accompanies the samples to the lab.

VI. LIMITATIONS & CERTIFICATION

The initial ground water investigation, site characterization at The Perfect Image, formerly Church's Body Shop has been performed for the exclusive use of Mr. Terry Church. Activities were limited to the authorized scope of work. Results are limited by the assumption that third party information, including laboratory analytical data, is accurate as reported to us. Applicability of results is limited to the site and to the time of our field investigation. Should further information become available to us, we reserve the right to alter our interpretations.

We, the undersigned, certify that this report fairly and completely represents conditions at the site as we found them. We further certify that our work was conducted following regulatory guidance and standard industry practice, to the best of our ability.

Sincerely,

Harvey C. Danner, Jr.
President/Project Manager

Andrew M. Raring, Ph.D., P.G.
Consulting Geologist

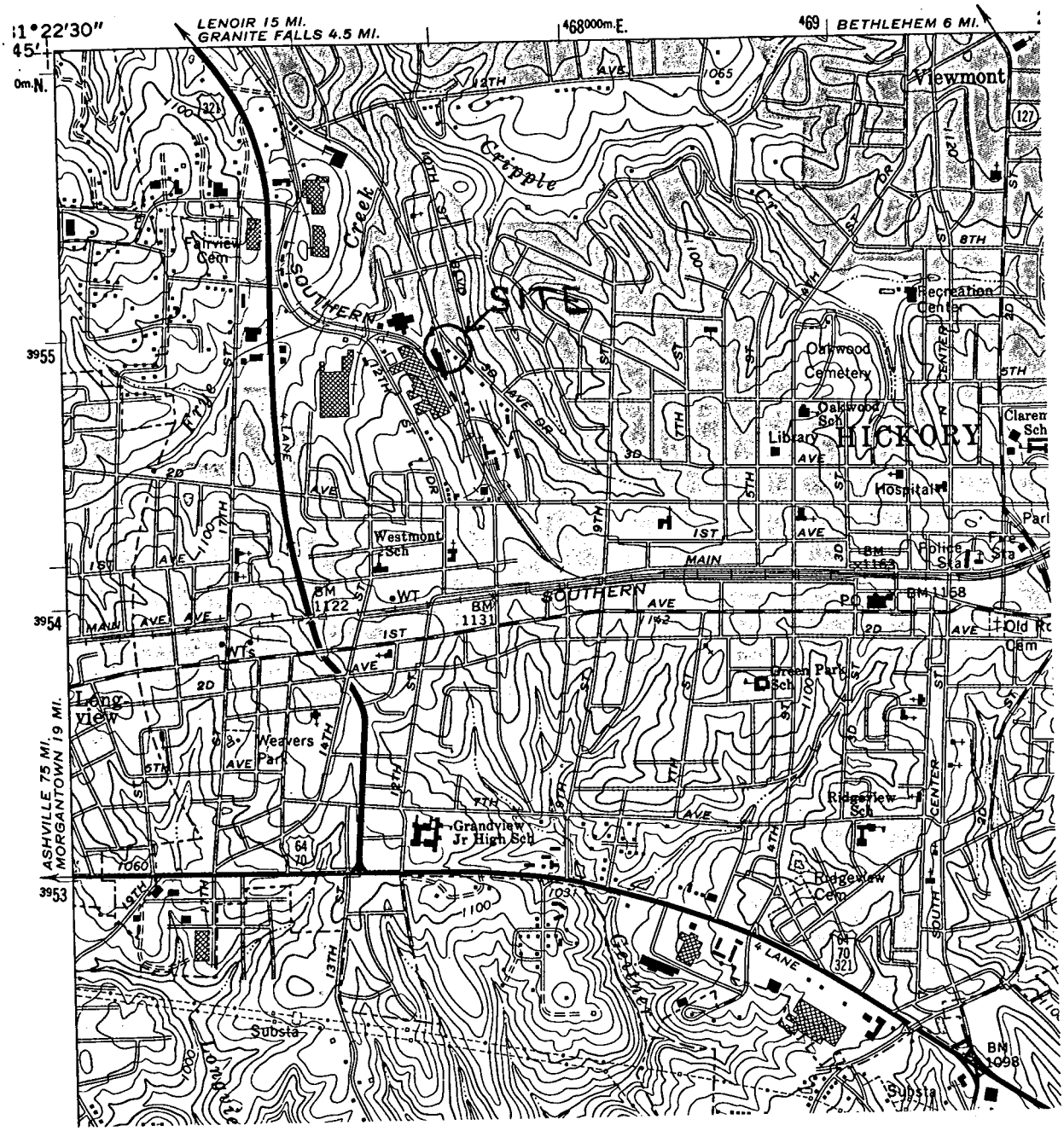

FIGURE 1–LOCATION MAP; CHURCH'S BODY SHOP

3rd Avenue Drive (Old Lenoir Road), Hickory, Catawba County

USGS HICKORY, NC, 7.5 MINUTE TOPOGRAPHIC QUADRANGLE MAP

SCALE: 1"=2000'

CERTIFOAM SERVICES, INC.

JULY, 1994

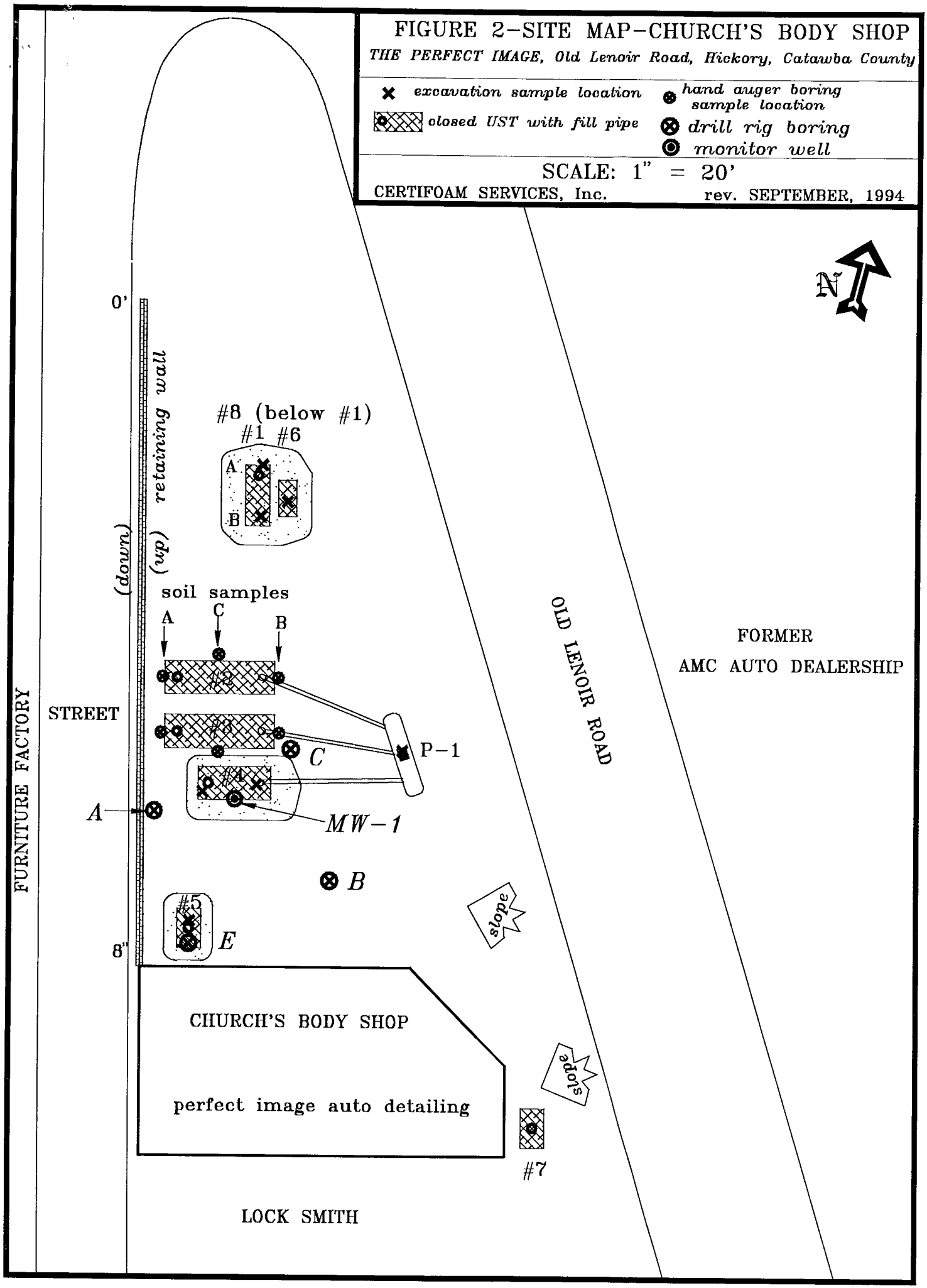
FIGURE 2–SITE MAP–CHURCH'S BODY SHOP
THE PERFECT IMAGE, Old Lenoir Road, Hickory, Catawba County
excavation sample location
hand auger boring sample location
closed UST with fill pipe
drill rig boring
monitor well
SCALE: 1" = 20'
CERTIFOAM SERVICES, Inc.
rev. SEPTEMBER, 1994
N
0'
8"
(down)
(up)
retaining wall
#8 (below #1)
#1 #6
A
B
soil samples
A
C
B
#2
#3
#4
C
P-1
A
MW-1
B
#5
E
#7
slope
slope
OLD LENOIR ROAD
FORMER
AMC AUTO DEALERSHIP
STREET
FURNITURE FACTORY
CHURCH'S BODY SHOP
perfect image auto detailing
LOCK SMITH

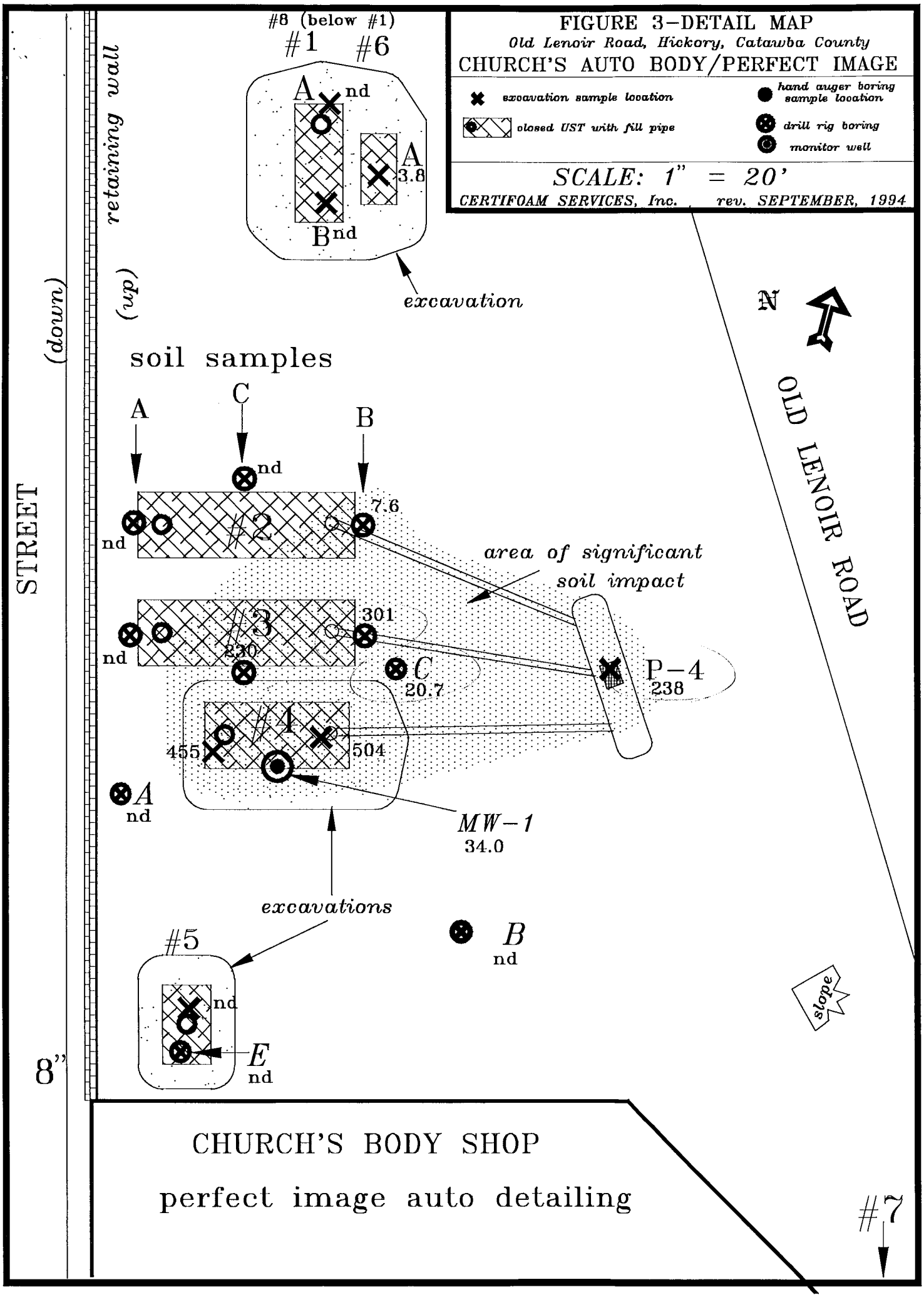
FIGURE 3–DETAIL MAP
Old Lenoir Road, Hickory, Catawba County
CHURCH'S AUTO BODY/PERFECT IMAGE
excavation sample location
closed UST with fill pipe
hand auger boring sample location
drill rig boring
monitor well
SCALE: 1" = 20'
CERTIFOAM SERVICES, Inc.
rev. SEPTEMBER, 1994
#8 (below #1)
#1
#6
A nd
A 3.8
B nd
retaining wall
(up)
(down)
STREET
excavation
soil samples
N
OLD LENOIR ROAD
A
C
B
nd
7.6
nd
#2
area of significant soil impact
301
nd
#3
230
C 20.7
P–4 238
#4
455
504
A nd
MW–1 34.0
excavations
#5
B nd
nd
E nd
slope
8"
CHURCH'S BODY SHOP
perfect image auto detailing
#7

Blue Ridge Labs
P.O. Box 2940 • Pine Mountain Road
Lenoir, North Carolina 28645
Telephone (704) 728-0149

CLIENT: Certifoam Services, Inc.
P.O. Box 5524
Winston Salem, NC 27113

Attention: Mr. H. Danner, Jr.

DATE RECEIVED: August 29, 1994

DATE REPORTED: September 14, 1994

SAMPLE NUMBER	SAMPLE DESCRIPTION
408-1886B	Soil; E-8'-P.I. for 8021.

PARAMETER	RESULTS	MQL		DATE STARTED
408-1886B - 8021				
Benzene	*	10	ug/kg	9/07/94
Bromobenzene	*	20	ug/kg	9/07/94
Bromochloromethane	*	10	ug/kg	9/07/94
Bromodichloromethane	*	10	ug/kg	9/07/94
Bromoform	*	10	ug/kg	9/07/94
Bromomethane	*	10	ug/kg	9/07/94
n-Butylbenzene	*	10	ug/kg	9/07/94
sec-Butylbenzene	*	10	ug/kg	9/07/94
tert-Butylbenzene	*	10	ug/kg	9/07/94
Carbon Tetrachloride	*	10	ug/kg	9/07/94
Chlorobenzene	*	10	ug/kg	9/07/94
Chloroethane	*	10	ug/kg	9/07/94
Chloroform	*	10	ug/kg	9/07/94
Chloromethane	*	100	ug/kg	9/07/94
2-Chlorotoluene	*	10	ug/kg	9/07/94

* Concentrations are below Minimum Quantification Limit except where noted.

NC Laboratory Certificate No. 275.

PARAMETER	RESULTS	MQL		DATE STARTED
408-1886B - 8021				
4-Chlorotoluene	*	10	ug/kg	9/07/94
Dibromochloromethane	*	10	ug/kg	9/07/94
1,2-Dibromo-3-Chloropropane	*	20	ug/kg	9/07/94
1,2-Dibromoethane (EDB)	*	10	ug/kg	9/07/94
Dibromoethane	*	10	ug/kg	9/07/94
1,2-Dichlorobenzene	*	10	ug/kg	9/07/94
1,3-Dichlorobenzene	*	10	ug/kg	9/07/94
1,4-Dichlorobenzene	*	10	ug/kg	9/07/94
Dichlorodifluoromethane	*	10	ug/kg	9/07/94
1,1-Dichloroethane	*	10	ug/kg	9/07/94
1,2-Dichloroethane	*	10	ug/kg	9/07/94
1,1-Dichloroethene	*	10	ug/kg	9/07/94
cis-1,2-Dichloroethene	*	10	ug/kg	9/07/94
trans-1,2-Dichloroethene	*	10	ug/kg	9/07/94
1,2-Dichloropropane	*	10	ug/kg	9/07/94
1,3-Dichloropropane	*	10	ug/kg	9/07/94
2,2-Dichloropropane	*	10	ug/kg	9/07/94
1,1-Dichloropropene	*	10	ug/kg	9/07/94
cis-1,3-Dichloropropene	*	10	ug/kg	9/07/94
trans-1,3-Dichloropropene	*	10	ug/kg	9/07/94
Ethyl Benzene	*	10	ug/kg	9/07/94
Hexachlorobutadiene	*	10	ug/kg	9/07/94
Isopropylbenzene	*	10	ug/kg	9/07/94
p-Isopropyltoluene	*	10	ug/kg	9/07/94
Methylene Chloride	*	100	ug/kg	9/07/94

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PARAMETER	RESULTS	MQL		DATE STARTED
408-1886B - 8021				
Naphthalene	*	10	ug/kg	9/07/94
n-Propylbenzene	*	10	ug/kg	9/07/94
Styrene	*	10	ug/kg	9/07/94
1,1,1,2-Tetrachloroethane	*	10	ug/kg	9/07/94
1,1,2,2-Tetrachloroethane	*	10	ug/kg	9/07/94
Tetrachloroethene	*	10	ug/kg	9/07/94
Toluene	*	10	ug/kg	9/07/94
1,2,3-Trichlorobenzene	*	10	ug/kg	9/07/94
1,2,4-Trichlorobenzene	*	10	ug/kg	9/07/94
1,1,1-Trichloroethane	*	10	ug/kg	9/07/94
1,1,2-Trichloroethane	*	10	ug/kg	9/07/94
Trichloroethene	*	10	ug/kg	9/07/94
Trichlorofluoromethane	*	10	ug/kg	9/07/94
1,2,3-Trichloropropane	*	10	ug/kg	9/07/94
1,2,4-Trimethylbenzene	*	10	ug/kg	9/07/94
1,3,5-Trimethylbenzene	*	10	ug/kg	9/07/94
Vinyl Chloride	*	10	ug/kg	9/07/94
O-Xylenes	*	10	ug/kg	9/07/94
M-Xylenes	*	10	ug/kg	9/07/94
P-Xylenes	*	10	ug/kg	9/07/94

REPORTED BY: _____

D. R. Wessinger - General Manager

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NC Laboratory Certificate No. 275.

Blue Ridge Labs
P.O. Box 2940 • Pine Mountain Road
Lenoir, North Carolina 28645
Telephone (704) 728-0149

CLIENT: Certifoam Services, Inc.
P. O. Box 5524
Winston-Salem, NC 27113

Attention: Mr. H. Danner, Jr.

DATE RECEIVED: August 29, 1994

DATE REPORTED: September 14, 1994

SAMPLE NUMBER	SAMPLE DESCRIPTION
408-1886A	Water; MW-1-P.I. for 601/602.

PARAMETER	RESULTS	MQL	DATE STARTED
408-1886A- 601			
- Bromodichloromethane	*	0.5 ug/l	8/30/94
- Bromoform	*	0.5 ug/l	8/30/94
- Bromomethane	*	0.5 ug/l	8/30/94
- Carbon Tetrachloride	*	0.5 ug/l	8/30/94
- Chloroethane	*	0.5 ug/l	8/30/94
- 2-Chloroethylvinyl Ether	*	0.5 ug/l	8/30/94
- Chloroform	*	0.5 ug/l	8/30/94
- Chloromethane	*	1.0 ug/l	8/30/94
- Dibromochloromethane	*	0.5 ug/l	8/30/94
- Dichlorodifluoromethane	*	0.5 ug/l	8/30/94

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NC Laboratory Certificate No. 275.

PARAMETER	RESULTS	MQL	DATE STARTED
408-1886A- 601			
- 1,1-Dichloroethene	*	0.5 ug/l	8/30/94
- trans-1,2-Dichloroethene	*	0.5 ug/l	8/30/94
- 1,2-Dichloropropane	*	0.5 ug/l	8/30/94
- 1,1-Dichloroethane	*	0.5 ug/l	8/30/94
- 1,2-Dichloroethane	22.7	0.5 ug/l	8/30/94
- cis-1,3-Dichloropropene	*	0.5 ug/l	8/30/94
- trans-1,3-Dichloropropene	*	0.5 ug/l	8/30/94
- Ethyl Dibromide (EDB)	8.4	0.5 ug/l	8/30/94
- Methylene Chloride	*	5.0 ug/l	8/30/94
- 1,1,2,2-Tetrachloroethane	*	0.5 ug/l	8/30/94
- Tetrachloroethene	*	0.5 ug/l	8/30/94
- 1,1,1-Trichloroethane	*	0.5 ug/l	8/30/94
- 1,1,2-Trichloroethane	*	0.5 ug/l	8/30/94
- Trichloroethene	0.8	0.5 ug/l	8/30/94
- Trichlorofluoromethane	*	0.5 ug/l	8/30/94
- Vinyl Chloride	*	0.5 ug/l	8/30/94

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NC Laboratory Certificate No. 275.

PARAMETER	RESULTS	MQL	DATE STARTED
408-1886A- 602			
- Benzene**	143	0.5 ug/l	8/30/94
- Chlorobenzene	*	0.5 ug/l	8/30/94
- 1,2-Dichlorobenzene	*	0.5 ug/l	8/30/94
- 1,3-Dichlorobenzene	*	0.5 ug/l	8/30/94
- 1,4-Dichlorobenzene	*	0.5 ug/l	8/30/94
- Ethyl Benzene**	195	0.5 ug/l	8/30/94
- Toluene**	384	0.5 ug/l	8/30/94
- Xylenes**	706	0.5 ug/l	8/30/94
- MTBE**	1082	0.5 ug/l	8/30/94
- IPE	7.5	0.5 ug/l	8/30/94

**NOTE: Estimated values, beyond linear range.

REPORTED BY: _____

D. R. Wessinger - General Manager

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CLIENT: Certifoam Services, Inc.
P. O. Box 5524
Winston-Salem, NC 27113

Attention: Mr. H. Danner, Jr.

DATE RECEIVED: August 29, 1994

DATE REPORTED: September 01, 1994

SAMPLE NUMBER	SAMPLE DESCRIPTION
408-1887A	Soil; A-10'-P.I. for 5030.
408-1887B	Soil; B-10'-P.I. for 5030.
408-1887C	Soil; C-10'-P.I. for 5030.
408-1887D	Soil; D-28'-P.I. for 5030.

PARAMETER	RESULTS	MQL	DATE ANALYZED
408-1887A - 5030	*	1.0 mg/kg	8/30/94
408-1887B - 5030	*	1.0 mg/kg	8/30/94
408-1887C - 5030	20.7	1.0 mg/kg	8/30/94
408-1887D - 5030	34.0	1.0 mg/kg	8/30/94

REPORTED BY: _____
D. R. Wessinger - General Manager

* Concentrations are below Minimum Quantification Limit except where noted.

NC Laboratory Certificate No. 275.

408-1886
408-1887

Blue Ridge Labs
P.O. Box 2940 • Pine Mountain Road
Lenoir, North Carolina 28645
Telephone (704) 728-0149

CHAIN OF CUSTODY RECORD

CLIENT: CERTIfoam Services Inc
(910) 661-9231

PROJECT NAME: Perfect Image P.O.Number: _____

Sample I.D.	Sample Type	Collection Date	Collection Time	Pres. pH<2	Pres. pH>12	Temp	Int.	Requested Analysis
MW-1-P.I.	H_2O	8/29	3:40			4°C	A.M.	601/602
E-8'-P.I	Soil	8/29	10:25			4°C	A.M.	8021
A-10'-P.I	↓	8/29	10:50			↓	AM	5030
B-10'-P.I.		↓	11:10				A.M.	↓
C-10'-P.I.			11:35				A.M.	
D-~~28~~'-P.I	↓	↓	12:15			↓	A.M.	

RELINQUISHED BY: Cathy Medlin — DATE: 8/29/94 — RECEIVED BY: Kim Johnson

Page ___ of ___

REV. 3/9/94

North Carolina - Department of Environment, Health, and Natural Resources
Division of Environmental Management - Groundwater Section
P.O. Box 29535 - Raleigh, N.C. 27626-0535
Phone (919) 733-3221

FOR OFFICE USE ONLY
QUAD. NO. _____ SERIAL NO. _____
Lat. _____ Long. _____ RO _____
Minor Basin _____
Basin Code _____
Header Ent. _____ GW-1 Ent. _____

WELL CONSTRUCTION RECORD

DRILLING CONTRACTOR: CERTIFOAM SERVICES, INC

DRILLER REGISTRATION NUMBER: 1251

STATE WELL CONSTRUCTION PERMIT NUMBER: _____

MW-1

1. WELL LOCATION: (Show sketch of the location below)
   Nearest Town: HICKORY County: CATAWBA
   OLD LENOIR ROAD, 3RD AVENUE DRIVE
   (Road, Community, or Subdivision and Lot No.)
2. OWNER MR TERRY CHURCH
   ADDRESS P.O. BOX 1528
   (Street or Route No.)
   HICKORY NC 28603-1528
   City or Town State Zip Code
3. DATE DRILLED 8/29/94 USE OF WELL MONITORING
4. TOTAL DEPTH _____
5. CUTTINGS COLLECTED YES ☐ NO ☒
6. DOES WELL REPLACE EXISTING WELL? YES ☐ NO ☒
7. STATIC WATER LEVEL Below Top of Casing: 34 FT.
   (Use "+" if Above Top of Casing)
8. TOP OF CASING IS +1 FT. Above Land Surface*
   * Casing Terminated at/or below land surface is illegal unless a variance is issued in accordance with 15A NCAC 2C .0118
9. YIELD (gpm): N/A METHOD OF TEST _____
10. WATER ZONES (depth): UNCONFINED AQUIFER
11. CHLORINATION: Type N/A Amount _____

DEPTH From	DEPTH To	DRILLING LOG Formation Description
0	2"	ASPHALT
2"	8"	STONE base
8"	8'	Orange clayey silt, sl. micaceous
8	40 ft	Tan, sandy silt SAPROLITE micaceous, gneissic texture

If additional space is needed use back of form

12. CASING:

	Depth From	To	Ft.	Diameter	Wall Thickness or Weight/Ft.	Material
	0	25		2	Sch 40	PVC

13. GROUT:

	Depth From	To	Ft.	Material	Method
	0	21		Cement	Poured
	21	23		Bentonite	Poured

14. SCREEN:

	Depth From	To	Ft.	Diameter	in.	Slot Size	in.	Material
	25	40		2	in.	.010	in.	PVC
					in.		in.	
					in.		in.	

15. SAND/GRAVEL PACK:

	Depth From	To	Ft.	Size	Material
	23	40		Coarse	Qtz Sand

16. REMARKS: flush mount protective casing, bolt down lid - padlocked expansion cap

I DO HEREBY CERTIFY THAT THIS WELL WAS CONSTRUCTED IN ACCORDANCE WITH 15A NCAC 2C, WELL CONSTRUCTION STANDARDS, AND THAT A COPY OF THIS RECORD HAS BEEN PROVIDED TO THE WELL OWNER.

Oct. 3rd, 1994

SIGNATURE OF CONTRACTOR ~~OR AGENT~~ DATE

Submit original to Division of Environmental Management and copy to well owner.

GW-1 REV. 9/91